ABSTRACT

[Summary]

[Object] To provide a high-performance rare earth-based magnet exhibiting a high coercive force or a high residual magnetic flux density even when the content of a rare earth element such as Dy or the like which is scarce is reduced.

[Construction] A rare earth-iron-boron based magnet includes a crystal grain boundary layer enriched in element M (M is at least one rare earth element selected from Pr, Dy, Tb, and Ho) by diffusion of the element M from the surface of the magnet, wherein the relation between the coercive force H_{cj} and the content of the element M in the whole of the magnet is represented by the following expression: $H_{cj} \geq 1 + 0.2 \times M$ (wherein $0.05 \leq M \leq 10$) wherein H_{cj} is the coercive force (unit: MA/m), and M is the content of the element M in the whole of the magnet (% by mass). Furthermore, the magnet satisfies the following expression: $Br \geq 1.68 - 0.17 \times H_{cj}$ wherein Br is the residual magnetic flux density (unit: T).